

Claim Amendments

Please amend claims to be as follows.

1. (currently amended) A communications system for transporting multiple individual video [[data]] streams from a centralized location to ~~an end-user~~ multiple end user devices, the system comprising:

a network that transmits ~~video data~~ the multiple individual video streams from a centralized location to ~~a video cache~~ at a local center located ~~as close as possible~~ nearer than the centralized location to the multiple end user devices;

a video cache at [[a]] the local center capable of receiving ~~video data from a the~~ multiple individual video streams from the centralized location;

[[a]] multiple customer premises device devices capable of receiving the ~~video data~~ multiple individual video streams from the video cache; and

a stream manager that controls [[a]] the multiple individual video stream streams from [[a]] the centralized location to [[a]] the local center,

wherein the stream manager is configured to control bandwidth prioritization between the centralized location and the local center, and

wherein the bandwidth prioritization is controlled by the stream manager such that as an individual video stream reaches a low fill level in the video cache at the local center, that individual video stream is assigned a higher bandwidth priority when compared to other individual video streams that have fuller fill levels.

2. (currently amended) The system of claim 1, wherein the network comprises any one or a combination of multiple packet based networks, wherein the network carries video data and carries control communications between the stream manager and the video cache.

3. (original) The system of claim 1, wherein the network comprises any packet based network, wherein the network carries video data, the system further comprising communication links, wherein the communication links carry control communications between the stream manager and the video cache.

4. (currently amended) The system of claim 1, wherein the video cache at the local center is capable of receiving video data from the centralized location at a transmission speed ~~some~~ faster than the speed at which ~~[[the]]~~ an end user device is capable of viewing the material.

5. (currently amended) The system of claim 1, wherein the video cache at the local center is further capable of determining when a data packet has been corrupted or lost during transmission and signaling to the centralized ~~storage~~ location to retransmit the ~~necessary~~ data packet.

6. (currently amended) The system of claim 1, wherein ~~[[the]]~~ a video cache based at the customer premises is capable both of receiving video data from the video cache at the local center at a speed ~~some~~ faster than a speed at which the end user device is capable of viewing the ~~material~~ video data and is capable of delaying the viewing of the video ~~content~~ data for ~~[[3-30]]~~ 3 to 30 seconds to allow for a buffer to be created.

7. (currently amended) The system of claim ~~[[1]]~~ 6, wherein the video cache based at the customer premises is further capable of determining when a data packet has been corrupted or lost during transmission and signaling to the video cache at the local center to retransmit the ~~necessary~~ data packet.

8. (currently amended) The system of claim 1, wherein ~~the video data may be previously stored, live or a combination of previously stored and live~~ the multiple individual video streams include both previously stored video and live broadcast video.

9. (currently amended) The system of claim 1, wherein the stream manager is ~~capable of determining~~ further configured to determine whether video content stored at the central location is a candidate for archiving at the local center based upon:

available storage space in ~~the local center~~ video storage at the local center;

history of the content being previously accessed by end users served by that local center; and

history of similar content being previously accessed by ~~end-users~~ the end user devices served by that local center.

10. (currently amended) The system of claim 1, wherein the stream manager is further ~~capable of prioritizing the~~ configured to prioritize transmission of the ~~various~~ multiple individual video streams based on a combination of ~~the following~~:

[[the]] a type of video data of an individual video stream;

[[the]] an amount of video data of the individual video stream remaining in the caches which require refreshing;

[[the]] a speed at which the end user is viewing the individual video stream; and

[[the]] a necessity to retransmit data due to corruption of video data and lost data packets of the individual video stream.

11. (currently amended) The system of claim 1, wherein the stream manager is further ~~capable of determining the~~ configured to determine a total volume of video data being transmitted over the network and ~~distributing~~ distribute the total volume of video data over multiple networks, including transmission over [[the]] a public Internet.

12. (currently amended) The system of claim 1, wherein the stream manager is further ~~capable of determining the~~ configured to determine an instantaneous amount of bandwidth required to transmit [[the video information]] an individual video data stream to each end user device and ~~staggering the~~ stagger transmission of high bandwidth instants with lower bandwidth instants in other individual video data streams to produce a smoother, aggregated stream between the centralized location and the local center.

13. (currently amended) A method of transporting multiple individual video [[data]] streams from a centralized location to ~~an end user~~ multiple end user devices, the method comprising:

transmitting, via a network, ~~video data~~ the multiple individual video streams to a ~~video cache at a local center located as close as possible to the end user~~ nearer than a centralized location to the multiple end user devices;

receiving, at a video cache at [[a]] the local center, ~~video data~~ the multiple individual video streams from [[a]] the centralized location;

receiving, at [[a customer premises device]] the end user devices, the ~~video data~~ multiple individual video streams from the video cache; and

controlling, via a stream manager, ~~[[a]] the multiple individual~~ video streams from ~~[[a]] the~~ centralized location to ~~[[a]] the~~ local center,

wherein the stream manager controls bandwidth prioritization between the centralized location and the local center, and

wherein the bandwidth prioritization is controlled by the stream manager such that as an individual video stream reaches a low fill level in the video cache at the local center, that individual video stream is assigned a higher bandwidth priority when compared to other individual video streams that have fuller fill levels.

14. (currently amended) The method of claim 13, wherein the network comprises any one or a combination of multiple packet based networks, wherein the network carries video data and carries control communications between the stream manager and the video cache,

15. (original) The method of claim 13, wherein the network comprises any packet based network, wherein the network carries video data, the system further comprising communication links, wherein the communication links carry control communications between the stream manager and the video cache.

16. (currently amended) The method of claim 13, wherein the video cache at the local center is capable of receiving video data from the centralized location at a transmission speed ~~some~~ faster than ~~[[the]]~~ a speed at which the end user device is capable of viewing the ~~material~~ video data.

17. (currently amended) The method of claim 13, wherein the video cache at the local center is further capable of determining when a data packet has been corrupted or lost during transmission and signaling to the centralized ~~storage~~ location to retransmit the ~~necessary~~ data packet.

18. (currently amended) The method of claim 13, wherein ~~[[the]]~~ a video cache based at the customer premises ~~is capable both of receiving~~ receives video data from the video cache at the local center at a speed ~~some~~ faster than the end user device is capable of viewing the ~~material~~ video data and is capable of delaying the viewing of the video ~~content~~ data for ~~[[3-30]]~~ 3 to 30 seconds to allow for a buffer to be created.

19. (currently amended) The method of claim ~~[[13]]~~ 18, wherein the video cache based at the customer premises is further capable of determining when a data packet has been corrupted or lost during transmission and signaling to the video cache at the local center to retransmit the ~~necessary data~~ packet.

20. (currently amended) The method of claim 13, wherein ~~the video data may be previously stored, live or a combination of previously stored and live~~ the multiple individual video streams include both previously stored video and live broadcast video.

21. (currently amended) The method of claim 13, wherein the stream manager ~~is capable of determining~~ determines whether video content stored at the central location is a candidate for archiving at the local center based upon:

available storage space in ~~the local center~~ video storage at the local center;

history of the content being previously accessed by end users served by that local center; and

history of similar content being previously accessed by ~~end users~~ end user devices served by that local center.

22. (currently amended) The method of claim 13, wherein the stream manager ~~is further capable of prioritizing the~~ prioritizes transmission of the ~~various~~ multiple individual video streams based on a combination of ~~the following~~:

~~[[the]]~~ a type of video data of an individual video stream;

~~[[the]]~~ an amount of video data of the individual video stream remaining in the caches which require refreshing;

~~[[the]]~~ a speed at which the end user device is viewing displaying the individual video stream; and

~~[[the]]~~ a necessity to retransmit data due to corruption of video data and lost data packets of the individual video stream.

23. (currently amended) The method of claim 13, wherein the stream manager ~~is further capable of determining the~~ determines a total volume of video data being

transmitted over the network and ~~distributing~~ distributes the total volume of video data over multiple networks, including transmission over ~~[[the]]~~ a public Internet.

24. (currently amended) The method of claim 13, wherein the stream manager ~~is further capable determining the~~ determines an instantaneous amount of bandwidth required to transmit ~~the video information~~ an individual video data stream to each end user device and ~~staggering the~~ staggers transmission of higher bandwidth instants with lower bandwidth instants in other individual video data streams to produce a smoother, aggregated stream between the centralized location and the local center.